

REMARKS

**Status of Claims:**

Claims 1-32 are present for examination.

**Drawing Changes:**

Submitted herewith are "Replacement Sheets" for Figs. 3-8. In these sheets applicant has changed the spelling of the word "EXCHNAGER" to the proper spelling of "EXCHANGER". No other changes have been made.

**Rejection under Sec. 112:**

Claim 8 stands rejected under 35 U.S.C. § 112 as being indefinite. Claim 8 has now been amended to remove the basis for the rejection.

**Prior Art Rejection:**

Claim 8 stand rejected under 35 U.S.C. § 10 as anticipated by Rows. Further various claims stand rejected under 35 U.S.C. § 103 as obvious over Rowe in combination with one or more of the secondary references of Schlesinger and McFee.

The examiner's rejections are respectfully traversed.

Applicant's claim 1 has been amended and now reads:

1. A thermal collection system comprising:
  - a first tank for storing relatively hot working fluid,
  - a second tank for storing relatively cold working fluid,
  - a heat exchanger connected for receiving said relatively hot working fluid from said first tank for providing heat to said heat exchanger, said heat exchanger discharging said working fluid at a lower temperature than a temperature of said relatively hot working fluid of said first tank;
  - a solar collector connected for receiving the lower temperature working fluid from said heat exchanger at least in a flow path

independent of said second tank and for heating said lower temperature working fluid, heated working fluid output from said solar collector being fed to at least one of said first tank and said second tank;

said second tank having a control valve selectively operative for permitting working fluid from said second tank to flow to said solar collector.

The underlined portion of the above claim emphasizes applicant's structure arrangement and serves to more clearly distinguish applicant's claims over the primary prior art Rowe teaching. In particular, the applicant provides (at least) a flow path from the heat exchanger 3 to the flat panel collectors 1 (See applicant's Fig. 3, for example) and this path does not go through the cold fluid tank 4. Rather, as shown in Applicant's Fig. 3, the fluid from the heat exchanger is able to pass to said solar collector from the heat exchanger 3, valve V2, valve V3 and then to the solar collectors 1. It is noted that some of the fluid may be routed to the cold fluid tank 4 through valve V2, but such fact does not change the fact that there is a flow path from the heat exchanger 3 to the solar collectors 1 that does not involve the cold fluid tank 4. No such corresponding teaching is shown in the Rowe disclosure, and the missing structural limitation are not supplied by the secondary references taken singly or in combination with Rowe. As such, it is thus submitted that the PTO has not made out a *prima facie* case of obviousness under the provisions of 35 U.S.C. § 103, and thus applicant's claim 1 is patentable over the prior art.

The above limitation has also been added to claim 27 thus serving to remove the Sec. 102 rejection applied to this claim. In order for a reference to be utilized as an anticipatory reference under the provisions of 35 U.S.C. § 102, the reference must disclose each and every claim limitation. This is certainly not the case here, and thus the Sec. 102 rejection must be withdrawn.

As to independent claim 28, this claim has been amended to recite, in relevant part:

during peak sunlight hours of the day, passing said relatively hot working fluid from a hot working fluid tank to a heat exchanger and then to said solar collector in a flow path independent of said cold working fluid tank; and

In this case (during peak sunlight hours), as may be seen from applicant's detailed description, there is no flow path from the heat exchanger to the cold fluid tank but rather the working fluid is passed (through various valves) from the heat exchanger to the solar collectors. Thus again, the recitations of claim 28 may be seen to readily distinguish applicants invention from the primary Rowe reference, and thus, as to claim 28, it is submitted that the PTO has not made out a *prima facie* case of obviousness under the provisions of 35 U.S.C. § 103. Claim 28 is thus deemed patentable over the prior art..

The sole remaining independent claim 31 has been amended in a similar manner as claim 28 and is deemed patentable for the same reasons.

Applicant's dependent claims are deemed to be patentable by virtue of their dependency on the above discussed independent claims.

**Conclusions:**

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.


The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 672-5407  
Facsimile: (202) 672-5399

David A. Blumenthal  
Attorney for Applicant  
Registration No. 26,257